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EXAMINER

HUANG, CHENG YUAN

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,146	Applicant(s) DRISCOLL ET AL.	
	Examiner CHENG HUANG	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 14-23 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 14-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080109</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Certain limitations recited in claims 10, 14, 16, 17, 18, and 19 are not present in Applicant's Specification. For example, Applicant's Specification does not recite the decorative graphic as an "in-mold decoration" in claim 14 or the "pocket" in claim 19.

Claim Objections

1. Claim 1 is objected to because of the following informalities: There appears to be a grammatical error concerning the phrase "a decorating processes". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 7, 10, 14, and 16-23 are rejected under 35 U.S.C. 112 for insufficient antecedent basis.

4. Claim 1 recites the limitations "the surface" and "the manufacturing and handling operations" in the fifth indented section of the claim.

5. Claim 7 recites the limitation "the surface" in the first line of the claim.

6. Claim 10 recites the limitation "the construction" in the first line of the claim.

Art Unit: 1794

7. Claim 14 recites the limitation "the graphic" in the second line of the claim and the limitation "the final product" in the last lines of the claim.
8. Claims 16 and 17 recites the limitation "the subsequent decorative graphic".
9. Claim 18 recites the limitations "the adhesive layer" in the first line of the claim and "the flexible transparent layer" in line 2 of the claim.
10. Claim 19 recites the limitations "the inserted decorative graphic" in the third line of the claim and "the decorative graphic pocket" in the fourth line of the claim.
11. Claim 20 recites the limitation "the stability" in the third and last line of the claim.
12. Claim 21 recites the limitation "the masking requirement" in the first line of the claim.
13. Claim 22 recites the limitation "the flexibility, dimensional, pliability....resistance".
14. Claim 23 recites the limitation "the described end uses" in the second indent of the claim and "the flexibility" in the third indent of the claim.
15. There is insufficient antecedent basis for each of these limitations in their respective claims.
16. Claims 1-10 and 14-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
17. Regarding all applicable claims, in particular claims 1 and 23, the phrase "married" is not clear in defining whether or not the polymers intended to be "married" are directly bonded to each other or simply in proximity of each other. Furthermore, as disclosed in Applicant's Specifications, (page 12, line 25-page 13, line 1), the flexible transparent polymeric layer has applied to at least one surface a graphic decoration layer, which potentially interferes with the relationship between the flexible transparent polymeric layer and the thermal and mechanical dimensionally resistant polymer.

Art Unit: 1794

It is unclear whether the polymers are in direct contact with each other. For the purposes of examination, the phrase “married” may be interpreted as layers in proximity but not necessarily directly next to each other.

18. Regarding claim 1, the phrase “potentially” is not a clearly positive limitation. It is unclear whether or not the recited limitation containing the phrase must be met or is optional. For the purposes of examination, the phrase “potentially...” will be interpreted as being optional.

19. Regarding claim 3 and 6, the phrase “to produce various effects” is unclear as to what creates the “various effects.” Are the optical properties e.g., “transparent, white, or colored” of the claimed pressure sensitive adhesive the “various effects” itself or are the optical properties a medium for further producing “various effects”? With consideration of Applicant Specifications, page 12, it appears that the colored adhesive itself produces the desired “various effects.” However, it is further unclear as to what the “various effects” are.

20. Regarding claims 4, 16, and 17, where one component in the system is replaced by another, is unclear in that doing so contradicts the claim requirement that was previously set forth, e.g., in claim 1. It becomes unclear as to which invention - the intermediate product or the final product - is actually being claimed. For the purposes of examination, layers that are replacing other layers may or may not be considered as already referenced or existing layers.

21. Regarding claim 15, improper alternative language makes the selection for the additional layers unclear. It is unclear whether the choice of one (or more) of the additional layers listed includes one of “texture, metal, holographics, pearlescent pigments or films” in addition to one of “iridescent pigments or films” or whether one (or more) of the additional layers is selected among all choices listed in the claim. For the purposes of examination, one (or more) of the additional layers is selected among all those listed in the claim.

Art Unit: 1794

22. Regarding claim 18, it is unclear what is meant by the phrase “selectively.” For the purposes of examination, the phrase “selectively” will be interpreted as any “adhesive layer” applied to the “flexible transparent layer” or “adhesive layer” bonded to the “non-pressure sensitive adhesive layer.” Secondly, it is unclear whether the “a pressure sensitive adhesive” recited in the third line of the claim is the same pressure sensitive adhesive recited in claim 1 or a different one. In the event that the two recitations refer to the same component, insufficient antecedent basis for this limitation appears since claim 1 does not mention a pressure sensitive adhesive “layer”. For the purposes of examination, the “a pressure sensitive adhesive” will be interpreted as either the same or a different adhesive component. Furthermore, it is unclear as to which component this “a pressure sensitive adhesive layer” is included in. It appears said layer is further included in “the adhesive layer” and will be interpreted as such. Thirdly, the phrase “could be easily” is not a clearly positive limitation. It is unclear whether or not the recited limitation containing the phrase must be met or is optional. For the purposes of examination, the phrase “could be easily ...” will be interpreted as optional and functional limitation. Fourthly, it is unclear whether or not “additional decorative graphics” are being positively claimed. For the purposes of examination, phrases including “additional decorative graphics” will be treated as a functional limitation. Fifthly, it is unclear which layer the phrase “which includes the pressure sensitive adhesive layer for application to the article” is referencing. It appears to be referring to the non-pressure sensitive layer and will be interpreted as such. Lastly, it is unclear overall as to what is being claimed in claim 18, especially concerning what layers (or components) are being inserted in between which layers (or components).

23. Regarding claim 20, the use of the phrases “not used” and “will be” results in conflicting claimed limitations, in particular, the system of claim 1 includes the “thermal and mechanical dimensionally resistant polymer” which is not “used” in this depending claim. Furthermore, the

Art Unit: 1794

phrase “not used” is unclear in whether the component that is “not used” must necessarily be absent or may it be present. For the purposes of examination, the layer by which is “not used” may either be present or absent from the invention.

24. Regarding claim 23, the recitation “with the appropriate transparency and flexibility to perform in the described end uses”, in particular “the described end uses”, is unclear and will be treated as a conditional limitation. Secondly, it is unclear which polymer the modifier “with” is referencing. For the purposes of examination, the modifier “with” is interpreted to refer to the “flexible transparent polymer.” Lastly, the use of the phrase “after” in the last indent of the claim results in uncertainty as to which invention – the intermediate product or the final product – is being claimed. For the purposes of examination, the recitation containing the phrase “after” will be treated as a conditional limitation.

Claim Rejections - 35 USC § 102

25. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

26. Claims 1, 3, 4, 6, 7, 9, 10, 14, 15, 18-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lu (U.S. Patent No. 5,670,096).

27. Regarding claim 1, Lu teaches an architectural graphic system (overlay 20 or 30) comprising a decorative graphic article (printed information 29A), a thermal and mechanical dimensionally resistant polymer (polyester or polyvinyl polymers of array 24), a flexible transparent polymer (polyester or polyvinyl polymers of transparent spacing layer 22, col. 8, lines 26-27) married to the

Art Unit: 1794

thermal and mechanical dimensionally resistant polymer (col. 5, lines 33-35, Fig. 2), and a pressure sensitive adhesive (adhesive layer 28) applied to the decorative graphic article (Fig. 2).

28. The recitations “wherein the thermal and mechanical dimensionally resistant polymer acts to impart...” and “wherein the thermal and mechanical dimensionally resistant polymer also acts to protect...” are method limitations and do not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The claimed system would be expected to encompass the overlay taught by Lu since Lu discloses the claimed features of the instantly claimed invention. Therefore the prior art article would be expected to be identical to or substantially identical to those encompassed by the claim. The Applicant has failed to demonstrate that the process limitations in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

29. Regarding claims 3 and 6, Lu teaches an architectural graphic system (overlay 20) wherein the adhesive (adhesive layer 28) is transparent (col. 5, lines 57-58).

30. Regarding claim 4, Lu teaches an architectural graphic system (overlay 20) wherein the adhesive (adhesive layer 28) may be a thermal adhesive (col. 5, lines 53-56),

31. Regarding claim 7, Lu does not explicitly teach the surface of the thermal and mechanical dimensionally resistant polymer not in contact with the flexible transparent polymer being constructed to provide an easy release of the pressure sensitive adhesive. However, the evaluation of the functional limitation “constructed to provide an easy release of the pressure sensitive adhesive” is considered to define the particular capability of the surface of the thermal and mechanical dimensionally resistant polymer to be able to provide an easy release of the pressure sensitive adhesive. The contoured structure of the top surface of microlenses array 34 is reasonably presumed

Art Unit: 1794

to be capable of providing an easy release of the pressure sensitive adhesive 38. Furthermore, since both the prior art and instantly claimed invention comprise of substantially identical, if not identical, materials of polyester, the prior art invention is deemed capable of providing an easy release of the pressure sensitive adhesive.

32. Regarding claim 9, Lu teaches an architectural graphic system (overlay 20) wherein the pressure sensitive adhesive (adhesive layer 28) is applied to the decorative graphic article (printed information 29A) and is not protected by a release liner (Fig. 2).

33. Regarding claim 10, Lu teaches an architectural graphic system (overlay 30) wherein the construction of the system is self-wound as a web (col. 9, lines 55-56, Fig. 3) and capable of being wound such that a pressure sensitive adhesive surface (bottom surface of adhesive layer 38) is directly in contact with the surface of the thermal and mechanical dimensionally resistant polymer (top surface of microlenses array 34) not in contact with the flexible transparent polymer.

34. Regarding claim 14, the claimed limitation of “the decorative graphic is an in- mold decoration where...” is a method limitation and does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The prior art article is expected to be identical to or substantially identical to those encompassed by the claim since Lu teaches the claimed limitations of the instantly claimed invention, as shown above. The Applicant has failed to demonstrate that the claimed product-by-process limitations necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

35. Regarding claim 15, Lu teaches an architectural graphic system (overlay 20) further comprising additional layers of nacreous pigment coatings (col. 7, lines 5-12) which are considered

Art Unit: 1794

as pearlescent pigments or films or iridescent pigments or films, incorporated into the layers of the construction to impart additional graphic impact (Fig. 2).

36. Regarding claim 18, Lu teaches an architectural graphic system (overlay 30) wherein the adhesive layer (adhesive layer 38) is applied to the flexible transparent layer (transparent spacing layer 32), wherein the adhesive layer (adhesive layer 38) bonds to a non-pressure sensitive layer (ink 36 or transparent reflecting layer 37) and further includes a pressure sensitive adhesive layer (transparent adhesive stratum 33).

37. The evaluation of the functional limitation “such that additional decorative graphics could be easily inserted in-between the flexible transparent layer and the non-pressure sensitive layer which includes the pressure sensitive adhesive layer for application to the article” is considered to define the particular capability of the area in-between the flexible transparent layer and the non-pressure sensitive layer to easily receive additional decorative graphics. Since the structure of the prior art is substantially identical, if not identical, to the instantly claimed invention, additional decorative graphics deemed capable of easily being inserted in-between the flexible transparent layer and the non-pressure sensitive layer. Furthermore, in light of the 35 U.S.C. 112, second paragraph, rejection discussed above, it may be reasonable to presume that the prior art does, in fact, teach the resulting invention in that the additional decorative graphic (ink 36) is provided in-between the flexible transparent layer (transparent spacing layer 32) and non-pressure sensitive layer (transparent reflecting layer 37).

38. In view of the 35 U.S.C. 112, second paragraph, rejection regarding the phrase “selectively”, the prior art is deemed to teach the adhesive being "selectively applied" because a layer of adhesive is applied to the substrate or the flexible transparent layer and the adhesive “selectively bonds” because the layer of adhesive bonds to the non-pressure sensitive layer, as shown above. Additionally, the

Art Unit: 1794

prior art may teach layers not "directly" applied or not "directly" bonded that may still meet the claimed limitation of "applied" or "bonds".

39. Regarding claim 19, Lu does not explicitly teach the area in-between the flexible transparent layer and the non-pressure sensitive layer that forms a pocket. However, it may be reasonable to presume that area in-between the flexible transparent layer (transparent spacing layer 32) and the non-pressure sensitive layer (transparent reflecting layer 37) may form a pocket considered to be the space in place of an omitted ink 36. Regarding the functional limitation "which requires all or parts of the flexible transparent layer not be decorated such that the inserted decorative graphic is visible when the decorative graphic pocket is applied to the article to be decorated," the "inserted" decorative graphic (ink 36) of Lu is visible (Fig. 3).

40. Regarding claim 20, Lu does not explicitly teach the thermal and mechanical dimensionally resistant polymer not being used because the architectural graphic system will be decorated with graphics in web form where the stability of the thermal and mechanical dimensionally resistant polymer is not required, or decorated by a digital printing process where the stability of the thermal and mechanical dimensionally resistant polymer is not required. However, these limitations are method limitations and do not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The printed decorative graphic article (printed information 29A) as taught by Lu teaches would be expected to encompass the claimed decoration since both are printed decorations. Therefore the prior art article would be expected to be identical to or substantially identical to those encompassed by the claim. The Applicant has failed to demonstrate that the process limitations in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

Art Unit: 1794

41. Regarding claim 21, the claimed limitation of “the masking requirement...” is a method limitation and does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The prior art article is expected to be identical to or substantially identical to those encompassed by the claim since Lu teaches the claimed limitations of the instantly claimed invention, as shown above. The Applicant has failed to demonstrate that the claimed product-by-process limitations necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

42. Regarding claim 22, Lu teaches the flexibility (col. 8, lines 26-28), weather resistance, and abrasion resistance (col. 7, lines 50-52) requirements of the flexible transparent polymer. Furthermore the flexible transparent polymer (transparent spacing layer 22) of Lu comprises substantially identical, if not identical, material (vinyl) as that of the instantly claimed invention. Therefore the prior art article would be expected to be identical to or substantially identical to those encompassed by the claim and exhibit comparable resistance characteristics.

43. Regarding claim 23, Lu teaches a multilayer decorated article (overlay 20) comprising a thermal and mechanical dimensionally resistant polymer (polyester or polyvinyl polymers of array 24, col. 8, lines 26-27), a flexible transparent polymer (polyester or polyvinyl polymers of transparent spacing layer 22, col. 8, lines 26-27) married to the thermal and mechanical dimensionally resistant polymer (col. 5, lines 33-35, Fig. 2), and wherein the decorated article (overlay 20) is applied to a pressure sensitive adhesive (adhesive layer 28).

44. The recitations “[a flexible transparent polymer] with the appropriate transparency and flexibility to perform in the described end uses” and “wherein the flexibility required is such that

Art Unit: 1794

manufacturing operations will still require the thermal and mechanical dimensionally resistant polymer to be married to the transparent flexible polymer” are functional limitations and do not limit the scope of the claim since the resulting structure, in addition to the materials, of the claimed invention, is substantially identical, if not identical, to the prior art structure. Lu teaches a flexible transparent polymer (polyester or polyvinyl polymers of transparent spacing layer 22) that is transparent (col. 5, line 25) and flexible (col. 8, lines 26-27). Therefore, the flexible transparent polymer as taught by Lu encompasses that of the instantly claimed invention and is expected to meet the claimed limitations.

45. The recitation “after the decorating and graphic applying operations” is a method limitation and does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The prior art article is expected to be identical to or substantially identical to those encompassed by the claim since Lu teaches the claimed limitations of the instantly claimed invention, as shown above. The Applicant has failed to demonstrate that the process limitation in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

46. Claims 1, 3, 4, 6, 15-17, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Salmon et al. (U.S. Patent No. 6,170,881).

47. Regarding claims 1 and 23, Salmon et al. teaches an architectural graphic system or multilayer decorated article (printed article 10) comprising a decorative graphic article (textured pattern 14), a thermal and mechanical dimensionally resistant polymer (polyester polymer of carrier film, col. 4, lines 49-50), a flexible transparent polymer (plastic polymer of base sheet 12, col. 3, line 59)

Art Unit: 1794

proximate to the thermal and mechanical dimensionally resistant polymer, and a pressure sensitive adhesive (adhesive 16) applied to the decorative graphic article (col. 4, lines 50-51).

48. The recitations “wherein the thermal and mechanical dimensionally resistant polymer acts to impart...” and “wherein the thermal and mechanical dimensionally resistant polymer also acts to protect...”, which are recited in claim 1, are method limitations and do not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The claimed system would be expected to encompass the printed article taught by Salmon et al. since Salmon et al. discloses the claimed features of the instantly claimed invention. Therefore the prior art article would be expected to be identical to or substantially identical to those encompassed by the claim. The Applicant has failed to demonstrate that the process limitations in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

49. The recitations “[a flexible transparent polymer] with the appropriate transparency and flexibility to perform in the described end uses” and “wherein the flexibility required is such that manufacturing operations will still require the thermal and mechanical dimensionally resistant polymer to be married to the transparent flexible polymer”, which are recited in claim 23, are functional limitations and do not limit the scope of the claim since the resulting structure, in addition to the materials, of the claimed invention, is substantially identical, if not identical, to the prior art structure. Salmon et al. teaches a flexible transparent polymer (plastic polymer of base sheet 12) that is transparent and flexible (col. 3, lines 48-50). Therefore, the flexible transparent polymer as taught by Salmon et al. encompasses that of the instantly claimed invention and is expected to meet the claimed limitations.

Art Unit: 1794

50. The recitation “after the decorating and graphic applying operations” is a method limitation and does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The prior art article is expected to be identical to or substantially identical to those encompassed by the claim since Salmon et al. teaches the claimed limitations of the instantly claimed invention, as shown above. The Applicant has failed to demonstrate that the process limitation in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

51. Regarding claims 3, 4, and 6, Salmon et al. teaches an architectural graphic system (printed article 10) wherein the adhesive (adhesive 16), which can be either pressure sensitive or heat activated, is transparent (col. 4, lines 50-51).

52. Regarding claim 15, Salmon et al. teaches an architectural graphic system (printed article 10) further comprising reflective layer 18, which is considered as texture, metal, and holographics (col. 4, lines 44-46) and may be incorporated into any layer of the construction to impart additional graphic impact.

53. Regarding claims 16 and 17, Salmon et al. teaches an architectural graphic system (printed article 10) comprising a lenticular layer (reflective layer 18) such that the subsequent decorative graphic when viewed after application is three-dimensional (Title).

54. Claims 1-6, 15, and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. (U.S. Patent No. 4,983,436).

55. Regarding claims 1 and 23, Bailey et al. teaches an architectural graphic system (embedded-lens type retroreflective sheeting 44) comprising a decorative graphic article (legend 50), a thermal

Art Unit: 1794

and mechanical dimensionally resistant polymer (polymers of reinforcing layer 49, col. 7, lines 13-16), a flexible transparent polymer (polymers of transparent spacing layer 32, col. 10, lines 52-54) proximate to the thermal and mechanical dimensionally resistant polymer (Fig. 4), and a pressure sensitive adhesive (adhesive 48, col. 8, lines 52-55) applied to the decorative graphic article (adhesive 48, Fig. 4)

56. The recitations “wherein the thermal and mechanical dimensionally resistant polymer acts to impart...” and “wherein the thermal and mechanical dimensionally resistant polymer also acts to protect...” are method limitations and do not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The claimed system would be expected to encompass the retroreflective sheeting taught by Bailey et al. since Bailey et al. discloses the claimed features of the instantly claimed invention. Therefore the prior art article would be expected to be identical to or substantially identical to those encompassed by the claim. The Applicant has failed to demonstrate that the process limitations in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

57. The recitations “[a flexible transparent polymer] with the appropriate transparency and flexibility to perform in the described end uses” and “wherein the flexibility required is such that manufacturing operations will still require the thermal and mechanical dimensionally resistant polymer to be married to the transparent flexible polymer” are functional limitations and do not limit the scope of the claim since the resulting structure, in addition to the materials, of the claimed invention, is substantially identical, if not identical, to the prior art structure. Bailey et al. teaches a flexible transparent polymer (polymers of transparent spacing layer 32) that is transparent (col. 3, lines 17-18) and flexible (col. 2, lines 65-66). Therefore, the flexible transparent polymer as taught by

Art Unit: 1794

Bailey et al. encompasses that of the instantly claimed invention and is expected to meet the claimed limitations.

58. The recitation “after the decorating and graphic applying operations” is a method limitation and does not determine the patentability of the product, unless the process necessarily results in articles that are structurally or compositionally distinguishable from those of the prior art. The prior art article is expected to be identical to or substantially identical to those encompassed by the claim since Bailey et al. teaches the claimed limitations of the instantly claimed invention, as shown above. The Applicant has failed to demonstrate that the process limitation in a product claim necessarily do not encompass the article of the cited art. Absent persuasive evidence a rejection is appropriate. MPEP 2113.

59. Regarding claim 2, Bailey et al. teaches an architectural graphic system (embedded-lens type retroreflective sheeting 14) further comprising a release liner (release liner 40) applied to the pressure sensitive adhesive (adhesive 38, Fig. 2).

60. Regarding claims 3 and 6, Bailey et al. teaches an architectural graphic system (overlay embedded-lens type retroreflective sheeting 14) wherein the adhesive (adhesive 38) is transparent (col. 3, 34-35).

61. Regarding claim 4, teaches an architectural graphic system (embedded-lens type retroreflective sheeting 14) wherein the adhesive may be a thermal adhesive (col. 8, lines 52-55).

62. Regarding claim 5, Bailey et al. teaches an architectural graphic system (embedded-lens type retroreflective sheeting 14) further comprising a release liner (release liner 40) applied to the thermal adhesive (adhesive 38, Fig. 2).

63. Regarding claim 15, Bailey et al. teaches an architectural graphic system (embedded-lens type retroreflective sheeting 14) further comprises a specularly reflecting layer which is metal (col. 5, lines

Art Unit: 1794

31-32) that may be incorporated into any layer of the construction to impart additional graphic impact.

Claim Rejections - 35 USC § 103

64. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

65. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

66. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu (U.S. Patent No. 5,670,096) in view of Philips (U.S. Patent No. 6,156,442).

67. Lu is relied upon as disclosed above in the rejections regarding claims 1 and 7.

68. Lu fails to teach the surface of the thermal and mechanical dimensionally resistant polymer not in contact with the flexible transparent polymer being coated with a silicone or other release coating.

69. However, Philips teaches a thermal graphic transfer article 80 comprising polyester carrier layer 82 that is coated with a silicone anti-stick/release coating (col. 10, lines 61-67). It would have

Art Unit: 1794

been obvious to one of ordinary skill in the art at the time of the invention to coat the surface of the thermal and mechanical dimensionally resistant polymer not in contact with the flexible transparent polymer of Lu with an anti-stick/release coating to reduce friction and to prevent the articles from sticking to substrates where adherence is not desired (col. 10, lines 63-65).

Conclusion

70. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG YUAN HUANG whose telephone number is (571) 270-7387. The examiner can normally be reached on Monday-Thursday from 8 AM to 4 PM.

71. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil, can be reached at 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

72. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. H./
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March 27, 2009

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